Uranium Working Group

Presentation of Workplan and Schedule of Public Meetings

Uranium Subcommittee of the Coal and Energy Commission March 7, 2012







Uranium Working Group Members

- Department of Mines, Minerals and Energy (DMME)
- Department of Environmental Quality (DEQ)
- Department of Health (VDH)
- *Various staff will be utilized from each agency as different aspects are reviewed, analyzed and prepared, along with consultants hired by each agency with experience and expertise in the regulation and monitoring of uranium mining and milling
- *The UWG is deeply committed to effective collaboration. Even tasks identified below as "agency-specific" will require and receive input from other UWG members.







Previous Studies Conducted

- 1984 SENES Assessment of Risk & the associated Uranium Task Force Report
- National Academy of Sciences
- City of Virginia Beach
- Fairfax County Water Authority
- Roanoke River Basin Association
- Chmura Economics and Analytics
- RTI International







Governor's Directive

- Directed DMME, DEQ, and VDH to provide the necessary information to assess whether the moratorium on uranium mining in the Commonwealth should be lifted and if so, the proper way to regulate and monitor uranium mining and milling activity.
- Identified important questions related to the health and safety of workers, the public and the environment and the impact to the socioeconomic vitality of the areas near potential uranium sites that must be addressed before a determination about whether uranium mining and milling should be conducted.







Governor's Directive

 Provided 18 specific tasks, which included establishing a draft statutory and conceptual regulatory framework that could be used to govern all aspects of mining and milling uranium in Virginia using the complete life cycle analysis and provide for regular and structured analyses of risk, hazards and operation in a collaborative and highly structured management and regulatory system.







Workplan - All agencies

- Study Review
- Comparison of existing uranium mining and milling regulatory programs
- Review and summarize pertinent information and studies from such groups as the International Atomic Energy Agency, the World Nuclear Association, etc.
- Develop a conceptual comprehensive statutory and regulatory framework that encompasses the complete life cycle of compliance for uranium mining and milling







Workplan - All agencies

- Assess Virginia's unique conditions, such as population density, rainfall, temperate climate, water table levels and geography
- Assess economic impacts for the local community, region and the Commonwealth
- Prepare a proposed unified emergency preparedness and response plan
- Develop a conceptual public outreach process and citizen advisory board







Workplan - DMME

- Summarize the site-specific data provided by Virginia Uranium
- Analysis of the baseline conditions at the Coles Hill site with regard to water, soil, ore and waste rock and biota issues

- Provide a conceptual statutory and regulatory framework for:
 - uranium mine permitting process,
 - Mine worker health and safety plans and inspections,
 - regulatory authority over waste rock containing naturally occurring radioactive minerals,







Workplan - DMME

- Provide a conceptual statutory and regulatory framework for:
 - regulatory authority for groundwater-related impacts beyond the mine permit boundary
 - necessary components of a full environmental impact analysis at the mine site
 - requirements for mine site reclamation plans
 - performance bond and standards, surety







Workplan - DEQ

 Summarize the site-specific data provided by Virginia Uranium, Inc.

 Analyze the baseline conditions at the Coles Hill site with regard to air and water issues

Conduct a gap analysis of site-specific data available







Workplan - DEQ

- Provide a conceptual statutory and regulatory framework for:
 - Water quality monitoring plan for surface waters
 - Water quality monitoring plan for groundwater
 - Ensuring the adequacy of Virginia's Water Quality Standards for groundwater and surface waters
 - Standards for the safe disposal of mine waste







- Gap analysis of site-specific data available
- Evaluate the limitations of available studies and recommendations of public health experts on the design of relevant epidemiological studies
- Determine and characterize data available on health outcomes related to exposures of concern.







- Determine if current reporting requirements and laboratory testing capability cover chemicals likely to be encountered in mining operations under consideration.
- Determine if current tobacco use surveillance is adequate for establishing baseline data
- Determine whether other available data is sufficient to establish baseline rates for conditions of concern or if retrospective or other studies are indicated to determine baseline rates.







- Provide a conceptual statutory and regulatory framework for:
 - regulatory authority over milling and tailings
 - amending the existing NRC agreement if needed
 - regulatory authority over public drinking water
 - any necessary testing or monitoring of private wells
 - development of both community and mine and mill worker health and safety standards







- Provide a conceptual statutory and regulatory framework for:
 - reinstitution of the Radon program
 - establishing an active epidemiological surveillance program
 - regulations concerning recreational use of waters
 - developing and testing case report investigation worksheets
 - any additional measures to proactively protect the public's health







Public Input

- Web-Portal <u>www.uwg.vi.virginia.gov</u>
- Public Meetings of the Uranium Subcommittee of the Coal & Energy Commission
 - June 2012 Mine Permitting, Environmental Impact Analysis & Environmental Monitoring of Mine Sites, Disposal of Mine Waste, Mine Site Reclamation
 - August 2012 Water Quality monitoring plan for surface and groundwater, Air Quality monitoring plan, Virginia Water Quality Standards and Waterworks Regulations







Public Input

- Public Meetings of the Uranium Subcommittee of the Coal & Energy Commission
 - October 2012 Findings on issues related to public health and safety, Mill Licensing, Tailings Storage, Disposal and Monitoring, Mill Site Closure/Decommissioning, Drinking Water Regulations, Private Well Regulatory Framework, Recreational use of waters, Reinstitution of the Radon program, Environmental Monitoring, Epidemiological Surveillance
 - November 2012 Worker Health and Safety, Unified Emergency Preparedness and Response Plan, Summary of findings and presentation of draft statutory changes and conceptual regulation, summary of findings and recommendations regarding financial impacts







Questions?





